

Health Services

(SIC 80)

SIGNIFICANT POINTS

- Health services is one of the largest industries in the country, with about 11.3 million jobs, including the self-employed.
- About 14 percent of all wage and salary jobs created between 1998 and 2008 will be in health services.
- Twelve out of 30 occupations projected to grow the fastest are concentrated in health services.
- Most jobs require less than 4 years of college education.

Nature of the Industry

Combining medical technology and the human touch, the health services industry administers care around the clock, responding to the needs of millions of people—from newborns to the critically ill.

More than 460,000 establishments make up the health services industry; all vary greatly in terms of size, staffing, and organization. Two-thirds of all private health services establishments are offices of physicians or dentists. Although hospitals comprise less than 2 percent of all private health services establishments, they employ nearly 40 percent of all workers (table 1). When government hospitals are included, the proportion rises to almost half the workers in the industry.

Table 1. Percent distribution of wage and salary employment and establishments in private health services, 1997

| Establishment type | Establishments | Employment |
|--|----------------|------------|
| Total, health services | 100.0 | 100.0 |
| Hospitals, private | 1.6 | 39.6 |
| Offices of physicians and osteopaths | 41.8 | 18.5 |
| Nursing and personal care facilities .. | 4.3 | 18.1 |
| Home health care services | 3.3 | 7.3 |
| Offices of dentists | 23.8 | 6.5 |
| Offices of other health practitioners .. | 18.7 | 4.5 |
| Health and allied services, not elsewhere classified | 3.1 | 3.4 |
| Medical and dental laboratories | 3.4 | 2.0 |

The health services industry includes small-town physicians with private practices who employ only one medical assistant, as well as busy inner city hospitals that provide thousands of diverse jobs. Over half of all non-hospital health services establishments employ fewer than 5 workers (see chart). On the other hand, almost two-thirds of hospital employees were in establishments with over 1,000 workers (see chart on next page).

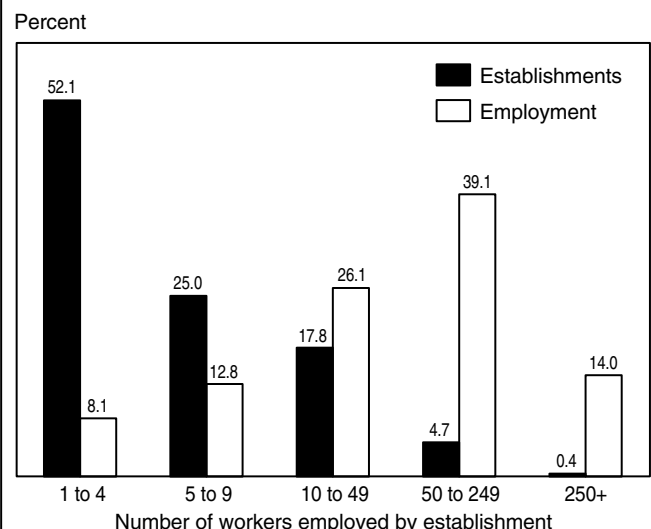
The health services industry is made up of the following eight segments:

Hospitals. Hospitals provide complete health care, ranging from diagnostic services to surgery and continuous nursing care. Some hospitals specialize in treatment of the mentally

ill, cancer patients, or children. Hospital-based care may be on an inpatient (overnight) or outpatient basis. The mix of workers needed varies, depending on the size, geographic location, goals, philosophy, funding, organization, and management style of the institution. As hospitals work to improve their efficiency, care continues to shift from an inpatient to outpatient basis whenever possible. Many hospitals have also expanded into long-term and home health care services, providing a continuum of care for the communities they serve.

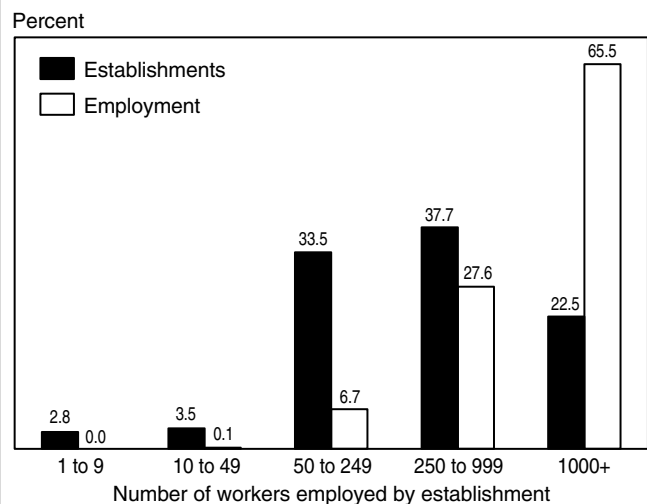
Nursing and personal care facilities. Nursing facilities provide inpatient nursing, rehabilitation, and health-related personal care to those who need continuous health care, but do not require hospital services. Nursing aides provide the vast majority of direct care. Other facilities, such as convalescent homes, help patients who need less assistance. A growing segment within personal care is assisted living facilities. These facilities house the elderly in a home-like, independent setting and provide care appropriate to each resident's level of need.

Over half of all non-hospital health services establishments employ fewer than 5 workers



Source: U.S. Department of Commerce, *County Business Patterns*, 1997

Unlike other segments of the health services industry, almost two-thirds of hospital employees work in establishments with 1,000 or more workers



Source: U.S. Department of Commerce, *County Business Patterns*, 1997

Offices and clinics of physicians, including osteopaths. Doctors of medicine and osteopathy practice alone and in groups of practitioners who have the same or different specialties. Group practice has become the recent trend, including clinics, free standing emergency care centers, and ambulatory surgical centers. Physicians are more likely now to work as salaried employees of group medical practices, clinics, or health care networks than in the past.

Home health care services. Skilled nursing or medical care is sometimes provided in the home, under a physician's supervision. Home health care services are provided mainly to the elderly. The development of in-home medical technologies, substantial cost savings, and patients' preference for care in the home have helped make this once small segment of the industry one of the fastest growing in the U.S. economy.

Offices and clinics of dentists. Almost 1 out of every 4 health care establishments is a dentist's office. Most employ only a few workers who provide general or specialized dental care, including dental surgery.

Offices and clinics of other health practitioners. This segment includes offices of chiropractors, optometrists, and podiatrists, as well as occupational and physical therapists, psychologists, audiologists, speech-language pathologists, dietitians, and other miscellaneous health practitioners. Demand for services in this industry is related to the ability of patients to pay, either directly or through health insurance. Hospitals and nursing facilities may contract out for these services. This industry also includes alternative medicine practitioners, such as acupuncturists, hypnotists, and naturopaths. Demand for these services has grown with public awareness of the professions.

Health and allied services, not elsewhere classified. Among the diverse establishments in this group are kidney dialysis centers, outpatient facilities such as drug treatment clinics and rehabilitation centers, and other miscellaneous establishments such as blood banks and providers of childbirth preparation classes.

Medical and dental laboratories. Medical laboratories provide professional analytic or diagnostic services to the medical profession or directly to patients following a physician's prescription. Workers analyze blood, take x rays, or perform other clinical tests. In dental laboratories, workers make dentures, artificial teeth, and orthodontic appliances. Medical and dental laboratories provide the fewest number of jobs in health services.

Technological advances have made many new procedures and methods of diagnosis and treatment possible. For example, information technology continues to improve care and efficiency with devices such as hand held computers that record notes on each patient. Information on vital signs and orders for tests are then transferred to a main database, eliminating paper and reducing record keeping errors. Clinical developments such as organ transplants, less invasive surgical techniques, skin grafts, and gene therapy for cancer treatment continue to increase longevity and improve the quality of life for many Americans, as well as redistribute the demand for health care workers. Advances in medical technology have improved the survival rates of trauma victims and the severely ill, who then need extensive care from therapists and social workers, among other support personnel.

Cost containment in the health care industry is important as shown by the growing emphasis on providing services on an outpatient, ambulatory basis; limiting unnecessary or low priority services; and stressing preventive care that reduces the eventual cost of undiagnosed, untreated medical conditions. Enrollment in managed health care programs—predominantly Health Maintenance Organizations (HMO's), Preferred Provider Organizations (PPO's), and hybrid plans such as Point-of-Service (POS) programs—continues to grow. These prepaid plans provide comprehensive coverage to members and control health insurance costs by emphasizing preventive care. A growing phenomenon in the health services industry is the formation of Integrated Delivery Systems (IDS) where two or more segments of the industry are combined to increase efficiency through the streamlining of primarily financial and managerial functions. According to a 1998 Deloitte & Touche Survey, only 34 percent of surveyed hospitals expect to be stand-alone, independent facilities in 2003, as compared to 58 percent in 1998. These changes will continue to reshape not only the nature of the health services workforce, but also the manner in which health services are provided.

Working Conditions

Nonsupervisory workers in private health services averaged 33.1 hours per week in 1998, compared to 34.6 for all private industry. Hours varied somewhat among the different

segments of the industry. Workers in home health care averaged only 29.0 hours per week; those in nursing and personal care facilities worked 32.6 hours; and hospital workers averaged 35.0 hours.

Many workers in the health services industry are on part-time schedules. Part-time workers comprised 15.9 percent of the workforce as a whole in 1998, but accounted for 35.6 percent of workers in offices of dentists and 19.6 percent of those in offices of physicians. Students, parents with young children, dual jobholders, and older workers make up much of the part-time workforce.

Many health services establishments operate around the clock and need staff at all hours. Shift work is common in some occupations, such as registered nurses. Many health service workers hold more than one job; particularly registered nurses, health technologists and technicians, and nursing aides.

In 1997, the incidence rate for occupational injury and illness in hospitals was 10.0 cases per 100 full-time workers, compared to an average of 7.1 for the private sector. Nursing and personal care facilities had a much higher rate, 16.2. Health care workers involved in direct patient care must take precautions to guard against back strain from lifting patients and equipment, exposure to radiation and caustic chemicals, and infectious diseases such as AIDS, tuberculosis, and hepatitis. Home care personnel who make house calls are exposed to the possibility of being injured in highway accidents, all types of overexertion when assisting patients, and falls inside and outside homes. Mechanical lifting devices, found in institutional settings, are seldom available in patients' homes.

Employment

The health services industry provided over 10.8 million wage and salary jobs in 1998. Almost one-half of all health services jobs were in hospitals; another one-third were in either nursing and personal care facilities or offices of physicians. About 92 percent worked in the private sector; the remainder worked in State and local government hospitals.

In addition to wage and salary workers, an estimated 446,000 workers in the industry were self-employed in 1998. Of these, about 70 percent were in offices of physicians, dentists, and other health practitioners. Health services jobs are found throughout the country, but are concentrated in large States, specifically California, New York, Florida, Texas, and Pennsylvania.

Workers in this industry tend to be older than workers in other industries, especially in occupations requiring higher levels of education and training, because they are more likely to stay in such occupations for a number of years.

Occupations in the Industry

Health services firms employ workers in professional specialty and service occupations in about equal numbers. Together, these two occupational groups cover nearly 3 out of 5 jobs in the industry. The next largest share of jobs is in administrative support occupations, followed by technicians and related support occupations. Executive, administrative, and managerial occupations account for only 6 percent of employment. Other occupations in health services comprise only 1 percent of the total (table 2).

Professional specialty occupations, such as *physicians, registered nurses, social workers, and therapists*, mostly require a bachelor's degree in a specialized field or higher education in a specific health field, although registered nurses also enter through associate degree or diploma programs. Respiratory therapists often do not need a bachelor's degree, but this degree or a higher one is the most significant source of training for all other therapist occupations. Professional workers often have high levels of responsibility and complex duties. They may supervise other workers or conduct research, as well as provide services.

Service occupations attract many workers with little or no specialized education or training. This group includes *nursing and psychiatric aides, food preparation and service occupations, janitors and cleaners, dental and medical assistants, and personal care and home health aides*. Service workers may advance to higher-level positions or to new occupations, with experience and, in some cases, further education and training.

Technicians and related support occupations include many fast growing health occupations, such as *health information technicians* and *dental hygienists*. These workers may operate technical equipment and assist health practitioners and other professional workers. Graduates of 1- or 2-year training programs often fill these positions; these jobs usually require specific formal training beyond high school, but less than 4 years of college.

Most jobs in health services provide clinical services, but there also are many in occupations with other functions as well. Numerous workers in executive, administrative, and managerial occupations and marketing and administrative support jobs keep organizations running smoothly. Although many *health services managers* have a background in a clinical specialty or training in health services administration, many enter these jobs with a general business education.

Each segment of the health services industry employs a different mix of health-related occupations and other workers.

Hospitals. Hospitals employ workers with all levels of education and training to provide a wider variety of services than other segments of the health services industry. About 1 in 4 hospital workers is a registered nurse. Hospitals also employ many physicians, therapists, and social workers. About 2 in 10 jobs is in a service occupation, such as *nursing aide, psychiatric aide, food preparation and service worker, or janitor*. Hospitals also employ large numbers of health technicians, administrative support workers, craft workers, and operatives.

Nursing and personal care facilities. Almost two-thirds of all nursing facility jobs are in service occupations, primarily *nursing aides*. Professional specialty and administrative support occupations are a much smaller percentage of nursing facility employment than for other parts of the health services industry. Federal law requires nursing facilities to have licensed personnel on hand 24 hours a day, and to maintain an appropriate level of care.

Table 2. Employment of wage and salary workers in health services by occupation, 1998, and projected change, 1998-2008

(Employment in thousands)

| Occupation | 1998 | | 1998-2008 Percent change |
|--|----------------------|---------|--------------------------------|
| | Employment Number | Percent | |
| All occupations | 10,829 | 100.0 | 25.7 |
| Professional specialty | 3,195 | 29.5 | 27.4 |
| Registered nurses | 1,734 | 16.0 | 21.6 |
| Physicians | 412 | 3.8 | 35.3 |
| Social workers | 157 | 1.5 | 47.4 |
| Physical therapists | 109 | 1.0 | 34.5 |
| Respiratory therapists | 84 | 0.8 | 43.0 |
| Dentists | 80 | 0.7 | 18.9 |
| Physician assistants | 60 | 0.6 | 52.0 |
| Pharmacists | 54 | 0.5 | 11.5 |
| Occupational therapists | 49 | 0.5 | 30.3 |
| Computer systems analysts, engineers, and scientists | 41 | 0.4 | 62.3 |
| Speech-language pathologists and audiologists | 39 | 0.4 | 37.3 |
| Dietitians and nutritionists | 29 | 0.3 | 20.1 |
| Service | 3,011 | 27.8 | 29.7 |
| Nursing aides and psychiatric aides | 1,064 | 9.8 | 23.8 |
| Personal care and home health aides | 368 | 3.4 | 74.5 |
| Janitors and cleaners, including maids and housekeeping cleaners | 333 | 3.1 | 7.3 |
| Medical assistants | 246 | 2.3 | 58.8 |
| Dental assistants | 222 | 2.1 | 43.4 |
| Food preparation workers | 132 | 1.2 | 3.4 |
| Food and beverage service occupations | 92 | 0.9 | 6.9 |
| Physical therapy assistants and aides | 79 | 0.7 | 44.7 |
| Guards | 41 | 0.4 | -1.7 |
| Pharmacy assistants | 34 | 0.3 | 11.6 |
| Administrative support | 2,030 | 18.8 | 18.2 |
| General office clerks | 280 | 2.6 | 30.1 |
| Receptionists and information clerks | 376 | 3.5 | 15.2 |
| Medical secretaries | 210 | 1.9 | 12.5 |
| Office and administrative support supervisors and managers | 174 | 1.6 | 30.2 |
| Secretaries, except legal and medical | 173 | 1.6 | 15.9 |
| Billing, cost, and rate clerks | 113 | 1.1 | 34.7 |
| Bookkeeping, accounting, and auditing clerks | 95 | 0.9 | 8.8 |
| Technicians and related support | 1,707 | 15.8 | 26.9 |
| Licensed practical nurses | 567 | 5.2 | 19.2 |
| Clinical laboratory technologists and technicians | 277 | 2.6 | 17.4 |
| Radiologic technologists and technicians | 160 | 1.5 | 19.8 |
| Dental hygienists | 140 | 1.3 | 41.3 |
| Medical records and health information technicians | 81 | 0.8 | 48.2 |
| Surgical technologists | 54 | 0.5 | 41.8 |
| Psychiatric technicians | 50 | 0.5 | 4.3 |
| Emergency medical technicians | 35 | 0.3 | 37.6 |
| Dispensing opticians | 34 | 0.3 | 22.8 |
| Executive, administrative, and managerial | 597 | 5.5 | 27.4 |
| Health services managers | 175 | 1.6 | 36.1 |
| General managers and top executives | 90 | 0.8 | 31.3 |
| Precision production, craft, and repair | 152 | 1.4 | 3.7 |
| Dental lab technicians, precision | 34 | 0.3 | -1.8 |
| All other occupations | 136 | 1.3 | 13.4 |

Offices and clinics of physicians, including osteopaths. Many of the jobs in offices of physicians are in professional specialty occupations, primarily physicians and registered nurses. Even more jobs, however, are in administrative support occupations, such as *receptionists* and *medical secretaries*, who comprise almost two-fifths of the workers in physicians' offices.

Home health care services. More than half of the jobs in home health care are in service occupations, mostly *personal care and home health aides*. Nursing and therapist jobs also account for substantial shares of employment in this industry.

Offices and clinics of dentists. About one-third of the jobs in this segment are in service occupations, mostly *dental assistants*. The typical staffing pattern in dentists' offices consists of one professional with a support staff of *dental hygienists* and *dental assistants*. Larger practices are more likely to employ office managers and administrative support workers, as well as *dental laboratory technicians*.

Offices and clinics of other health practitioners. As in offices of physicians, many jobs are in administrative support occupations. About 1 in 6 jobs in this segment were for physical therapists, occupational therapists, or speech-language pathologists and audiologists.

Medical and dental laboratories. Technician and related support workers account for almost twice the proportion of jobs in this segment as in the total health services industry. These workers are mostly *clinical laboratory technologists and technicians* and *radiologic technologists*. This segment also has the smallest percentage of professional specialty workers of any segment of the health services industry. Many jobs also are in precision production, craft, and repair occupations—most notably, *dental laboratory technicians*.

Health and allied services, not elsewhere classified. This segment employs the highest percentage of professional specialty workers, many of whom are *social workers*, *social and human services assistants*, *registered nurses*, and *therapists*.

Training and Advancement

A variety of programs after high school provide specialized training for jobs in health services. Students preparing for health careers can enter programs leading to a certificate or a degree at the associate, baccalaureate, professional, or graduate levels. Two-year programs resulting in certificates or associate degrees are the minimum standard credential for occupations such as *dental hygienist* or *radiologic technologist*. Most *therapists* and *social workers* have at least a bachelor's degree; *physicians*, *optometrists*, and *podiatrists* have additional education and training beyond college. Persons considering careers in health care should have a strong desire to help others, genuine concern for the welfare of patients and clients, and an ability to deal with diverse people and stressful situations.

The health services industry provides many job opportunities for people without specialized training beyond high school. In fact, 56 percent of the workers in nursing and personal care facilities have a high school diploma or less, as do 24 percent of the workers in hospitals.

Some health services establishments provide on-the-job or classroom training, as well as continuing education. For example, in all certified nursing facilities, nursing aides must complete a State-approved training and competency evaluation program and participate in at least 12 hours of in-service education annually. Hospitals are more likely than other segments of the industry to have the resources and incentive to provide training programs and advancement opportunities to their employees. In other segments, staffing patterns tend to be more fixed and the variety of positions and advancement opportunities more limited. Larger establishments usually offer a greater range of opportunities.

Some hospitals provide training or tuition assistance in return for a promise to work for a particular length of time in the hospital after graduation. Many nursing facilities have similar programs. Some hospitals have cross-training programs that train their workers—through formal college programs, continuing education, or in-house training—to perform functions outside their specialties.

Health specialists with clinical expertise can advance to department head positions or even higher level management jobs. Health services managers can advance to more responsible positions, all the way up to chief executive officer.

Earnings

Average earnings of nonsupervisory workers in health services are slightly higher than the average for all private industry, with hospital workers earning considerably more than the average, and those in nursing and personal care facilities and home health care services earning considerably less (table 3). Average earnings often are higher in hospitals because their percentage of jobs requiring higher levels of education and training is greater than in other segments. Segments of the industry with lower earnings employ a large number of part-time service workers.

Table 3. Average earnings and hours of nonsupervisory workers in private health services by segment of industry, 1998

| Industry segment | Earnings | | Weekly hours |
|--|----------|---------|--------------|
| | Weekly | Hourly | |
| Total, private industry | \$442 | \$12.77 | 34.6 |
| Health services | 454 | 13.72 | 33.1 |
| Hospitals, private | 541 | 15.46 | 35.0 |
| Offices of physicians | 470 | 14.28 | 32.9 |
| Offices of dentists | 399 | 14.15 | 28.2 |
| Offices of other health practitioners | 397 | 13.13 | 30.2 |
| Home health care services | 334 | 11.50 | 29.0 |
| Nursing and personal care facilities | 318 | 9.76 | 32.6 |

As in most industries, professionals and managers typically earn more than other workers. Earnings in individual health services occupations vary as widely as their duties, level of education and training, and amount of responsibility (table 4). Some establishments offer tuition reimbursement, paid training, child day care services, and flexible work hours. Health care establishments that must be staffed around the clock to care for patients and handle emergencies often pay premiums for overtime and weekend work, holidays, late shifts, and when on-call. Bonuses and profit-sharing payments also may add to earnings.

Earnings vary not only by type of establishment and occupation, but also by size. Salaries are often higher in larger hospitals and group practices. Geographic location also can affect earnings.

Table 4. Median hourly earnings of the largest occupations in health services, 1997

| Occupation | Health services | All industries |
|--|-----------------|----------------|
| Registered nurses | \$18.84 | \$18.88 |
| Licensed practical nurses | 12.34 | 12.46 |
| Dental assistants | 10.59 | 10.62 |
| Medical assistants | 9.71 | 9.71 |
| Receptionists and information clerks | 9.19 | 8.69 |
| General office clerks | 9.05 | 9.10 |
| Home health aides | 7.94 | 7.75 |
| Nursing aides, orderlies, and attendants ... | 7.70 | 7.76 |
| Maids and housekeeping cleaners | 7.16 | 6.74 |

Unionization is more common in hospitals, although most segments of the health services industry are not heavily unionized. In 1998, 14.9 percent of hospital workers and 10.7 percent of workers in nursing and personal care facilities were members of unions or covered by union contracts, compared to 15.4 percent of all workers in private industry.

Outlook

Employment in the health services industry is projected to increase 26 percent through 2008, compared to an average of 15 percent for all industries (table 5). Employment growth is expected to add about 2.8 million new jobs—14 percent of all wage and salary jobs added to the economy over the 1998-2008 period. Projected rates of employment growth for the various segments of this industry range from 8 percent in hospitals, the largest and slowest growing industry segment, to 80 percent in the much smaller home health care services.

Table 5. Employment of wage and salary workers in health services by segment of industry, 1998, and projected change, 1998-2008

(Employment in thousands)

| Industry | 1998 Employment | 1998-2008 Percent change |
|---|--------------------|--------------------------------|
| | | |
| All industries | 128,008 | 15.3 |
| Health services | 10,829 | 25.7 |
| Hospitals, public and private | 4,909 | 7.7 |
| Nursing and personal care facilities | 1,762 | 25.6 |
| Offices of physicians | 1,853 | 41.2 |
| Home health care services | 672 | 80.5 |
| Offices of dentists | 646 | 29.9 |
| Offices of other health practitioners | 450 | 42.8 |
| Health and allied services, not elsewhere classified | 339 | 64.9 |
| Medical and dental laboratories | 199 | 24.5 |

Employment in health services will continue to grow for a number of reasons. The elderly population, a group with much greater than average health care needs, will grow faster than the total population between 1998 and 2008, increasing the

demand for health services, especially for home health care and nursing and personal care. As the baby boom generation ages, the incidence of stroke and heart disease will increase. Advances in medical technology will continue to improve the survival rate of severely ill and injured patients, who will then need extensive therapy. New technologies often lower the cost of treatment and diagnosis, but also enable identification and treatment of conditions not previously treatable. In addition, medical group practices and health networks will become larger and more complex, and will need more managerial and support workers.

Employment growth in the hospital segment will be the slowest within the health services industry, as it consolidates to control costs and as clinics and other alternate care sites become more common. Hospitals will provide more outpatient care, rely less on inpatient care, and streamline health care delivery operations. Job opportunities, however, will remain plentiful because hospitals employ a large number of people. The demand for dental care will increase due to population growth, greater retention of natural teeth by the middle-aged and older persons, and greater awareness of the importance of dental care and ability to pay for services. Rapid growth in other health services segments will mainly result from the aging of the population, new medical technologies, and the subsequent increase in demand for all types of health services. Also contributing to industry growth will be the shift from inpatient to less expensive outpatient care, made possible by technological improvements and Americans' increasing awareness and emphasis on all aspects of health. Various combinations of all these factors will assure robust growth in this massive, diverse industry.

The fastest growth is expected for workers in occupations concentrated outside the inpatient hospital sector, such as *medical assistants* and *personal care and home health aides*. Because of cost pressures, many health care facilities will adjust their staffing patterns to lower bottom-line labor costs. Where patient care demands and outside regulations allow, health care facilities will substitute lower-paid providers and

cross-train their workforce. Many facilities have cut the number of middle managers, while simultaneously creating new managerial positions as they diversify. Because traditional inpatient hospital positions are no longer the only option for many future health care workers, they must be flexible and forward-looking (chart).

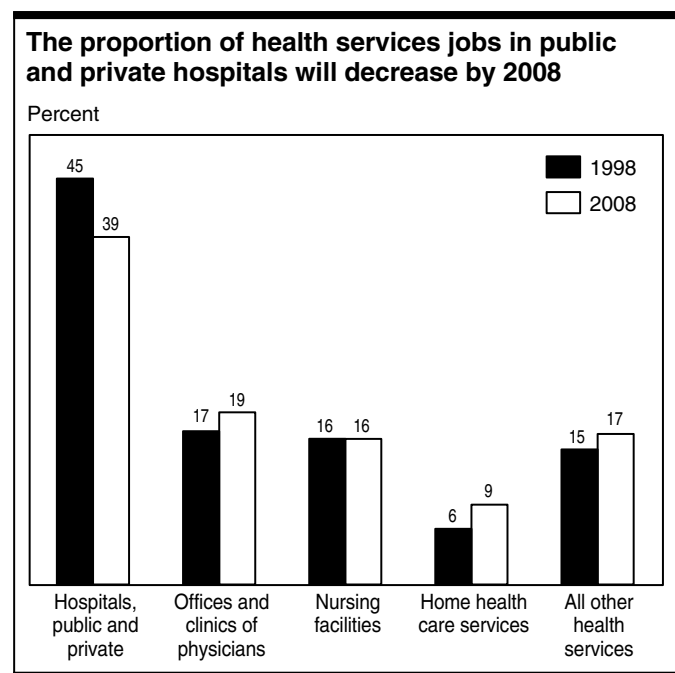
Besides job openings due to employment growth, additional openings will result as workers leave the labor force or transfer to other occupations. Occupations with the most replacement openings are usually large with high turnover due to low pay and status, poor benefits, low training requirements, and a high proportion of young and part-time workers. Many are service occupations, such as nursing aides. Occupations with relatively few replacement openings, on the other hand, are those with high pay and status, lengthy training requirements, and a high proportion of full-time workers, such as physicians.

For some executive, administrative, and managerial occupations, rapid growth will be countered by restructuring to reduce administrative costs and streamline operations. The effects of office automation and other technological changes will slow employment growth in administrative support occupations, but because the employment base is large, replacement needs will still create substantial numbers of job openings. Slower growing service occupations will also have job openings due to replacement needs.

Many of the occupations projected to grow the fastest are concentrated in the health services industry. By 2008, employment in all industries of personal care and home health aides is projected to increase by 58 percent, medical assistants by 58 percent, physician assistants by 48 percent, and health information technicians by 44 percent.

Technological changes, such as increased laboratory automation, will also affect the demand for some occupations. For example, the use of robotics in blood analysis may limit growth of clinical laboratory technologists and technicians, although the nature of health care precludes wholesale productivity gains in many instances.

Although workers at all levels of education and training will continue to be in demand, in many cases it may be easier for job seekers with health-specific training to obtain jobs and advance. Specialized clinical training is a requirement for many jobs in health services and is an asset even for many administrative jobs that do not specifically require it.



Sources of Additional Information

For referrals to hospital human resources departments about local opportunities in health care careers, write to:

- American Hospital Association/American Society for Hospital Human Resources Administrators, One North Franklin, Chicago, IL 60606.

For information on educational programs for allied health occupations from the *Health Professions Education Directory*, contact:

- American Medical Association, 515 North State St., Chicago, IL 60610. Internet: <http://www.ama-assn.org>

There is also a wealth of information on health careers and job opportunities available on the Internet from schools, associations, and employers.

Information on these occupations may be found in the 2000-01 *Occupational Outlook Handbook*.

- Cardiovascular technologists and technicians
- Chiropractors
- Clinical laboratory technologists and technicians
- Dental assistants
- Dental hygienists
- Dental laboratory technicians
- Dentists
- Dietitians and nutritionists
- Electroneurodiagnostic technologists
- Emergency medical technicians and paramedics
- Health information technicians
- Health services managers
- Licensed practical nurses
- Medical assistants
- Medical secretaries
- Nuclear medicine technologists
- Nursing and psychiatric aides
- Occupational therapists
- Ophthalmic laboratory technicians
- Opticians, dispensing
- Optometrists
- Personal care and home health aides
- Pharmacists
- Pharmacy technicians and assistants
- Physical therapists
- Physician assistants
- Physicians
- Podiatrists
- Psychologists
- Radiologic technologists
- Receptionists and information clerks
- Recreational therapists
- Registered nurses
- Respiratory therapists
- Social and human service assistants
- Social workers
- Speech-language pathologists and audiologists
- Surgical technologists
- Veterinarians